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REMARKS

In accordance with the foregoing, claims 1, 4, 9, 10 and 11 have been cancelled and claims 2, 3 and 5-8 have been amended.

It is respectfully submitted that claims 2, 3 and 5-8 are pending and under consideration. No new matter is being presented, and approval of the amended claims is respectfully requested.

I. REJECTION OF CLAIMS 1-11 FOR INDEFINITENESS UNDER 35 U.S.C. §112 FOR FAILING TO PARTICULARLY POINT OUT AND DISTINCTLY CLAIM THE SUBJECT MATTER WHICH APPLICANT REGARDS AS THE INVENTION

Claims 1, 4, 9, 10 and 11 have been cancelled. The limitations of claim 1 have been incorporated into claims 2, 3, and 5-8; however, the language has been amended to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Therefore, the rejections are respectfully traversed.

II. REJECTION OF CLAIMS 1-9 UNDER 35 U.S.C. §101 FOR BEING DIRECTED TO NON-STATUTORY SUBJECT MATTER

Claims 1, 4 and 9 have been cancelled. The limitations of claim 1 have been incorporated into claims 2, 3 and 5-8; however, the language has been amended so that the claims are tangibly embodied. Therefore, the rejections are respectfully traversed.

III. REJECTION OF CLAIMS 1-11 FOR OBVIOUSNESS UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER CHAVEZ ET AL. ("CHALLENGER: A MULTI-AGENT SYSTEM FOR DISTRIBUTED RESOURCE ALLOCATION" 1997 ACM, PP. 323-331) IN VIEW OF GRAY ET AL. (U.S. PATENT NO. 5,802,396)

In light of the arguments below, the rejections are respectfully traversed and reconsideration is requested.

CLAIM 2

Chavez et al. (hereinafter "Chavez") discloses a system that performs distributed resource allocation, consisting of requesting agents that evaluate bids from a set of bidding agents and assign the preferentially award a bid to an object that requires the lowest estimated time to complete the job. (See Section 3.2).

In contrast, amended claim 2 of the present application is characterized by using, as one bid determining parameter, a communication time that is necessary for communication between

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the task Initiator object and the objects sending the bidding message, and preferentially awarding a bid to an object that has a short communication time between objects. (See page 18, line 28-page 19 line 13 of the Specification).

The network speed is not only determined by its capacity, but changes according to the communications traffic from moment to moment. Conventionally, it was almost impossible to distribute tasks considering this communications traffic. However, the present invention recited in amended claim 2 makes it possible to distribute tasks according to the network speed without complex settings and without a special system. (See page 19, lines 8-13 of the Specification). Such an advantage cannot be obtained from Chavez.

Therefore, it is respectfully submitted that the features of amended claim 2 are not taught or suggested by Chavez.

CLAIM 3

Chavez discloses recording a bid (including an estimated time to complete the job) of each agent and changing the evaluation of the agent based on the comparison between a promised time and an actual processing time. (See Section 5.3).

In contrast, according to amended claim 3 of the present invention, an empirical value of past processing performances is used as a bid-determining parameter. There is no evaluation of the difference between the promised job completion time and the actual job completion time. Therefore, Chavez does not teach or suggest the features recited in amended claim 3.

CLAIM 5

In Chavez, agents that consistently underestimate job completion times are "penalized," while agents that consistently overestimate are "rewarded." (See Section 5.3).

In contrast, as recited in amended claim 5, the bid awarding portion selects an object having a bidding value indicative of large processing resources that can be assigned, and preferentially awards a bid to the selected object as the bid-winning object. Therefore, Chavez does not teach or suggest the features recited in amended claim 5.

CLAIM 6

On page 10 of the Office Action, the Examiner states that Chavez teaches an object load ratio showing a ratio of the already assigned processing resources to the bidding object's original processing resources, citing the ratio R_{a-to-p} , described in Section 5.3 of Chavez. However, the ratio R_{a-to-p} of Chavez is the ratio of the agent's actual completion time to the

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promised time. (See Section 5.3). Therefore, Chavez does not teach or suggest the features cited in amended claim 6.

CLAIM 7

On page 10-11 of the Office Action, the Examiner states that Chavez teaches a computer load ratio indicating a ratio of the already assigned processing resources to the processing resources of a computer that is executing the bidding object, citing the ratio R_{a-to-p} described in Section 5.3 of Chavez. However, the ratio R_{a-to-p} of Chavez is the ratio of the agent's actual completion time to the promised time. (See Section 5.3). Therefore, Chavez does not teach or suggest the features cited in amended claim 6.

CLAIM 8

On page 11 of the Office Action, the Examiner states that Chavez teaches using a bidding object's skillfulness at the task, which is based on resources available to the bidding object, as one bidding parameter.

Chavez states that the agent's use information contained in the request for bids message to calculate the estimated time to complete the job. (See Section 3.2). However, this is distinguishable from a bidding object's skillfulness at the task, as defined by amended claim 8. Skillfulness is not simply the estimated time to complete the job, but is whether the application used by the object is good or bad at processing the requested task. (See page 21, lines 7-8 of the Specification).

Claim 8 has been amended herein to clarify this distinction. Amended claim 8, in relevant part, recites:

...one bidding parameter, a skillfulness calculated based on a processing efficiency of the requested task depending on an application, and the bid awarding portion selects an object that is good at processing the requested task...

Therefore, Chavez does not teach or suggest the features of amended claim 8.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

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If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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